

**Notice of Allowability**

Application No.

10/647,582

Applicant(s)

TAKEUCHI, JUNICHI

Examiner

Long Nguyen

Art Unit

2816

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed on 10/31/05.
2. ☒ The allowed claim(s) is/are 7-12, 14, 17, 20, 21, 24, 25, 27 and 28.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☒ Certified copies of the priority documents have been received in Application No. 09/874,737.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

#### **In The Specification**

In the Pre-Amendment to the Specification filed on 8/25/03, on line 2 of the inserted paragraph for the CROSS-REFERENCE TO RELATED APPLICATION section (page 1 of the Amendment to the specification on 8/25/03), "2001." has been changed to --2001, now U.S. Patent No. 6,646,482--.

#### **Reasons For The Above Changes**

The above change is necessary so that the divisional information is clear.

### **REASONS FOR ALLOWANCE**

2. Claims 7-12, 14, 17, 20, 21, 24, 25, 27, 28 are allowed.

Claims 7 and 9 are allowed because the prior art of record fails to disclose or suggest a variable drive current circuit comprising, in response to other limitations, a control circuit for varying both the second bias current driven by the third current source circuit and the second bias current driven by the fourth current source circuit according to a control signal, and wherein each push-pull circuit comprises two transistors having their gates directly connected together as recited in the claims.

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Claims 8 and 14 are allowed because they depend on claim 7.

Claim 10 is allowed because they depend on claim 9.

Claims 11 and 24 are allowed because the prior art of record fails to disclose or suggest a variable drive current circuit comprising, in response to other limitations, a control circuit for varying both the third bias current driven by the third current source circuit and the fourth bias current driven by the fourth current source circuit according to a control signal, and wherein each push-pull circuit comprises two transistors having their gates directly connected together as recited in the claims.

Claims 12, 20 and 21 are allowed because they depend on claim 11.

Claim 25 is allowed because it depends on claim 24.

Claim 17 is allowed because the prior art of record fails to disclose or suggest a variable drive current circuit comprising, in response to other limitations, a control circuit for turning on or off both the second bias current driven by the third current source circuit and the second bias current driven by the fourth current source circuit according to a control signal, and wherein each push-pull circuit comprises two different types transistors as recited in the claim.

Claims 27 and 28 are allowed because the prior art of record fails to disclose or suggest a variable drive current circuit comprising, in response to other limitations, a control circuit for turning on or off both the third bias current driven by the third current source circuit and the fourth bias current driven by the fourth current source circuit according to a control signal, and wherein each push-pull circuit comprises two different types of transistors as recited in the claims.

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***Conclusion***

3. Any inquiry concerning this communication or earlier communications from the examiner should be directly to Examiner Long Nguyen whose telephone number is (571) 272-1753. The Examiner can normally be reached on Monday to Thursday from 8:00am to 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Callahan, can be reached at (571) 272-1740. The fax number for this group is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

November 8, 2005

  
**LONG NGUYEN  
PRIMARY EXAMINER**